

REMARKS

The present communication responds to the Notice to Correct Informalities mailed January 29, 2002 for the above-identified application. In the Notice to Correct Informalities, the Examiner stated that 1) the applicant elected claim 36, which was cancelled in the same paper, and 2) the applicant failed to indicate, which claims are readable on the elected embodiment. Since the Amendment dated December 3, 2001 has been entered into the record thereby canceling claim 36, applicant has added new claim 143. Claim 143 is a duplicate of amended claim 36 as submitted in the December 3, 2001, Amendment. Correspondingly, claims 81-85 and 87-114 have been amended to reflect proper claim dependency.

Finally, applicant again traverses the restriction requirement based upon the same rationale submitted in the Amendment dated December 3, 2001. However, to completely respond to the restriction requirement, applicant again provisionally elects the species claiming "defibrillate-first-then-pace" after "hemodynamically compromising malfunction detection", which is included in claims 81-143.

The Commissioner is hereby authorized to charge any additional filing fees required to Deposit Account No. 061910. If any additional fees are required to enter the present amendment, Applicant hereby authorizes the Office to charge our deposit account, Deposit Account No. 061910. If the Examiner feels that prosecution of the present application can be materially advanced by a telephonic interview, the undersigned would welcome a call at the number listed below.

Respectfully submitted,



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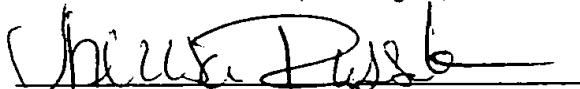
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Please grant any extension of time necessary for entry; charge any fee due to Deposit Account No. 06-1910.

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Theresa Russek

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Claims As Amended

Please amend claims 81-85 and 87-114 as follows:

81. (Amended) The method of claim [36] 143, further comprising the steps of reassessing the presence of a hemodynamically compromising malfunction at predetermined intervals and delivering a further series of pulses, the series including at least one pulse having a voltage of a normal defibrillation level, if a hemodynamically compromising malfunction is present.

82. (Amended) The method of claim [36] 143, further comprising the steps of reassessing the presence of a hemodynamically compromising malfunction at predetermined intervals and delivering a further series of electrical current pulses, the electrical current pulses having a voltage less than a normal defibrillation voltage level, if a hemodynamically compromising malfunction is present.

83. (Amended) The method of claim [36] 143, wherein the other medical intervention provided is a defibrillation shock.

84. (Amended) The method of claim [36] 143, wherein the step of delivering a series of pulses within the patient's body, the series including at least one pulse having a voltage of a normal defibrillation voltage level is performed before the step of delivering electrical current pulses through the patient's body, the electrical current pulses having a voltage less than a normal defibrillation voltage level.

85. (Amended) The method of claim [36] 143, wherein the step of delivering electrical current pulses through the patient's body, the electrical current pulses having a voltage less than a normal defibrillation voltage level, is performed before the step of delivering

a series of pulses within the patient's body, the series including at least one pulse having a voltage of a normal defibrillation voltage level.

87. (Amended) The method of claim [36] 143, wherein the positioning step includes positioning the plurality of electrodes proximate portions of the patient's heart.

88. (Amended) The method of claim [36] 143, further comprising the step of providing pressure sensing means for detecting the presence of a hemodynamically compromising malfunction in the patient.

89. (Amended) The method of claim [36] 143, further comprising the steps of monitoring cardiac output and adjusting the electrical current pulse with respect to amplitude to maintain a predetermined level of cardiac output.

90. (Amended) The method of claim [36] 143, wherein the electrical current pulses are timed to coincide with the natural pumping of the patient's atria.

91. (Amended) The method of claim [36] 143, wherein a plurality of the electrical current pulses have rounded edges.

92. (Amended) The method of claim [36] 143, wherein electrical current pulses are delivered at a level to maintain cardiac output for at least about 30 minutes.

93. (Amended) The method of claim [36] 143, wherein the electrical current pulses are delivered at a rate between about 60 and 200 beats per minute.

94. (Amended) The method of claim [36] 143, wherein the electrical current pulses are delivered at a rate of less than about 200 pulses per minute.

95. (Amended) The method of claim [36] 143, wherein the electrical current pulses are between 2 and 100 ms in width.

96. (Amended) The method of claim [36] 143, wherein the electrical current pulses are between 2 and 50 ms in width.

97. (Amended) The method of claim [36] 143, wherein the electrical current pulses comprise pulses which are greater than about 140 mA.

98. (Amended) The method of claim [36] 143, wherein the electrical current pulses each comprise a train of at least 10 narrow pulses.

99. (Amended) The method of claim [36] 143, wherein the electrical current each comprise several smaller pulses.

100. (Amended) The method of claim [36] 143, further comprising the step of forming a plurality of the electrical current pulses as a train of up to 50 narrow pulses.

101. (Amended) The method of claim [36] 143, wherein the electrical current pulses are delivered at a voltage of between 10 and 350 volts.

102. (Amended) The method of claim [36] 143, wherein the electrical current pulses are delivered at a voltage of between 50 and 200 volts.

103. (Amended) The method of claim [36] 143, wherein the electrical current pulses are delivered at a voltage of greater than 20 volts.

104. (Amended) The method of claim [36] 143, wherein the electrical current pulses are delivered at a voltage of less than about 200 volts.

105. (Amended) The method of claim [36] 143, wherein the electrical current pulses are delivered at a voltage of less than about 350 volts.

106. (Amended) The method of claim [36] 143, wherein the step of delivering electrical current pulses comprises delivery of a plurality of pulses each of which are greater than about 250mA.

107. (Amended) The method of claim [36] 143, wherein the hemodynamically compromising malfunction relates to an absence of cardiac contraction.

108. (Amended) The method of claim [36] 143, wherein the hemodynamically compromising malfunction is an arrhythmia.

113. (Amended) The method of claim [36] 143, further comprising the step of delivering a series of electrical current pulses through the patient's body, each pulse of the series having a voltage less than a normal defibrillation voltage level, after detecting the hemodynamically compromising malfunction but before delivering the series of pulses having at least one pulse having a voltage of a normal defibrillation voltage level.

114. (Amended) The method of claim [36] 143, further comprising the step of electronically interfacing the hemodynamically compromising malfunction detector with the other medical intervention.

Please add new claim 143 as follows:

143. (New) A method for forcing cardiac output during hemodynamically compromising malfunction in a patient, comprising the steps of:

- (a) positioning a plurality of electrodes to enable delivery of electrical pulses which will be transmitted within [through portions of] the patient's body;
- (b) providing circuitry for detecting the presence of a hemodynamically compromising malfunction in the patient;
- (c) detecting the presence of a hemodynamically compromising malfunction in the patient;

(d) delivering a series of pulses through the patient's body, the series including at least one pulse having a voltage of a normal defibrillation voltage level; and

(e) delivering electrical current pulses through the patient's body, the electrical current pulses having a voltage less than a normal defibrillation voltage level, to force contraction in the patient's muscles and to facilitate a minimum level of cardiac output until cessation of the hemodynamically compromising malfunction or until other medical intervention is provided.